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Kozo [JP/JP]; c/o Ebara Densan Ltd., 11-1, Haneda Asahi-cho, Ohta-ku, Tokyo 144-8575 (JP).

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(74) Agents: WATANABE, Isamu et al.; GOWA Nishi-Shinjuku 4F, 5-8, Nishi-Shinjuku 7-chome, Shinjuku-ku, Tokyo 160-0023 (JP).

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(71) Applicants (*for all designated States except US*): EBARA DENSAN LTD. [JP/JP]; 11-1, Haneda Asahi-cho, Ohta-ku, Tokyo 144-8575 (JP). EBARA CORPORATION [JP/JP]; 11-1, Haneda Asahi-cho, Ohta-ku, Tokyo 144-8510 (JP).

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(72) Inventors; and

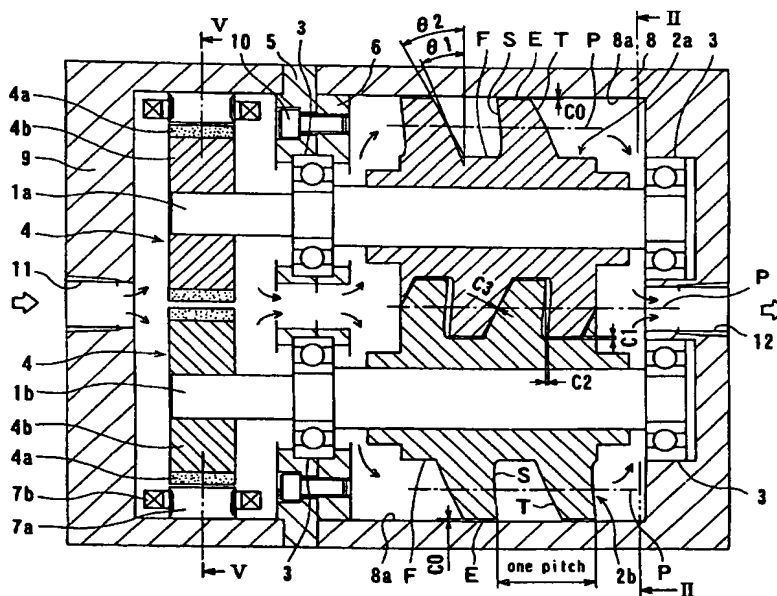
(75) Inventors/Applicants (*for US only*): MIYASHITA, Nobuhito [JP/JP]; c/o Ebara Densan Ltd., 11-1, Haneda Asahi-cho, Ohta-ku, Tokyo 144-8575 (JP). MATAKE,

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(54) Title: SCREW PUMP AND METHOD OF OPERATING THE SAME



(57) Abstract: A screw pump includes a pair of screw rotors (2a, 2b) having teeth which are held in mesh with each other for drawing and discharging a fluid by rotating the screw rotors (2a, 2b) synchronously in opposite directions. The teeth of the screw rotors (2a, 2b) have the same shape as each other and are coiled helically in opposite directions. The teeth of the screw rotors (2a, 2b) have an axial tooth profile which allows a pair of facing teeth surfaces T of the screw rotors (2a, 2b) to be brought into contact with each other only at a pitch line P when the pair of facing teeth surfaces T are brought into contact with each other.



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INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Japanese Utility Model Gazette 1946-1996, Japanese Publication of Unexamined Utility Model Applications 1971-2004, Japanese Registered Utility Model Gazette 1994-2004, Japanese Gazette Containing the Utility Model 1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5697772 A (Ebara Corporation) 1997.12.16, Whole document, Fig. 1 - Fig. 24 & EP 736667 A & TW 331581 A & JP 8-277790 A	1 - 8
Y	GB 419338 A (BRITISH THOMSON-HOUSTON COMPANY, LIMITED) 1934.11.09, p. 3, left column, 1. 1 - 43, Fig. 5 - Fig. 6a (Family: none)	1 - 8
Y	US 2511878 A (Roots-Connersville Blower Corporation) 1950.06.20, column 4, 1. 47 - column 5, 1. 4, Fig.2 (Family: none)	1 - 8
Y A	US 5814913 A (Ebara Corporation) 1998.09.29 Whole Document, Fig. 1 - Fig. 22 & EP 678966 A & JP 8-149766 A & JP 8-254193 A & DE 69503301 C	5 - 7 1 - 4, 8

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Japan Patent Office

3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan

Authorized officer

HIROE HAYANO

Seal

3T

8109

Telephone No. +81-3-3581-1101 Ext. 3393

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	JP 2000-50615 A (San-eikasei Kabusikigaisha) 2000.02.18 Whole document, Fig.4 (Family: none)	7 1 - 6, 8
A	GB 112104 A (EDWARD NUEBLING) 1917.12.27, p. 4, l. 54 - p. 5, l. 3 (Family: none)	1 - 8
A	JP 8-189485 A (Kabushikigaisha Ebara Seisakusho) 1996.07.23, Whole Document, Fig. 1 - Fig. 21 (Family: none)	1 - 8
A	JP 2001-37175 A (Kabushikigaisha Ebara Seisakusho) 2001.02.09, Whole Document, Fig. 1 - Fig. 11 (family: none)	1 - 8